AMENDMENTS TO THE CLAIMS

1.(currently amended) A mounting information-collecting device which collects ~~for collecting mounting~~ information concerning ~~mounted statuses of~~ mounting of circuit boards at a housing, including whether the circuit boards are each mounted in a predetermined position at the housing, ~~by using an optical signal,~~ the ~~mounting information collecting~~ device comprising:

a light-emitting device ~~means~~ that emits ~~the~~ an optical signal;

a plurality of optical signal-processing elements ~~means~~ cascaded one after another along a path of the optical signal, each of which processes ~~that apply processing to~~ the optical signal passing therethrough in a manner ~~unique to~~ that depends on the position and/or conditions of each of the circuit boards ~~to thereby generate a processed optical signal~~; and

a mounting information-collecting unit ~~means~~ that receives the ~~processed~~ optical signal that has traveled through said plurality of optical signal-processing elements and determines the positions and/or conditions of the circuit boards being mounted at the housing by identifying how the optical signal has been processed by said optical signal-processing elements ~~and detects whether or not the processing has been applied, to thereby collect the mounting information~~.

2.(currently amended) The mounting information-collecting device according to claim 1, wherein said optical signal-processing elements ~~means~~ each comprise a first optical filter portion for passing all wavelengths of the optical signal and a second filter portion for removing a particular wavelength specifically associated with a corresponding one of the circuit boards.

3.(currently amended) The mounting information-collecting device according to claim 2, wherein when the corresponding circuit board is not mounted, said optical signal-processing elements cause ~~means causes~~ the optical signal to enter said first optical filter portion, whereas when the corresponding circuit board is mounted, said optical signal-processing means causes the optical signal to enter said second optical filter portion.

4.(currently amended) The mounting information-collecting device according to claim 1, wherein ~~said signal-processing means applies the processing to~~ the optical signal emitted from said light-emitting ~~means~~ device has directional and non-diffusing properties, and said signal-processing elements have different mask patterns ~~and having a directional property but not having a diffusing property, such that a cutoff pattern of the optical signal varies with each circuit board~~.

5.(currently amended) The mounting information-collecting device according to claim 1, wherein said optical signal-processing elements ~~means~~ are each formed by a controllable optical filter which applies wavelength filtering processing to the optical signal based on an electric signal delivered from said corresponding circuit board.

Claim 6.(cancelled)

7.(currently amended) A mounting information-collecting method which collects ~~of collecting mounting~~ information concerning mounting of ~~mounted statuses of~~ circuit boards at

a housing, including whether the circuit boards are each mounted in a predetermined position at the housing, ~~by using an optical signal, the mounting information collecting~~ the method comprising the ~~step~~ steps of:

(a) emitting an ~~the~~ optical signal;

(b) supplying the optical signal along a single path to a plurality of positions where the circuit boards are to be mounted;

(c) at each of the circuit board positions, processing ~~applying processing to~~ the optical signal in a manner ~~unique to~~ that depends on the position and/or condition of each of the circuit boards ~~to thereby generate a processed optical signal~~; and

(d) receiving the ~~processed~~ optical signal that has traveled through the circuit board positions, and determining the positions and/or conditions of the circuit boards being mounted at the housing by identifying how the optical signal has been processed ~~and detecting whether or not the processing has been applied, to thereby collect the mounting information~~.

8.(currently amended) The mounting information-collecting method according to claim 7, wherein ~~the processing is performed by passing~~ at said processing step (c) all wavelengths of the optical signal are passed when the circuit board is not mounted, and ~~by removing~~ a particular wavelength of the optical signal specifically associated with each of ~~the~~ circuit board positions ~~boards~~ is removed [[,]] when the circuit board is mounted.

9.(currently amended) The mounting information-collecting method according to claim 7, wherein ~~the processing is applied to~~ the optical signal has directional and non-diffusing properties, and said processing step (c) uses different mask patterns to process the optical signal

~~having a directional property but not having a diffusing property, such that a cutoff pattern of the optical signal varies with each circuit board~~.

10.(currently amended) The mounting information-collecting method according to claim 7, wherein ~~the processing is performed by applying~~ said processing step (c) applies wavelength filtering processing to the optical signal based on an electric signal delivered from each of the circuit boards.